Syndromic Surveillance Notification Report

Weekly Updates: March 31, 2020

Notification: Increase in Emergency Department (ED) and Hospital Visits Related to COVID-19 Symptoms

Updates Provided by: Tri-County Health Department in coordination with Colorado Local Syndromic Surveillance counties (Adams, Arapahoe, Boulder, Denver, Douglas, El Paso, Jefferson, and Larimer counties)

- **Purpose**
  - To provide weekly updates to Public Health partners regarding a disease trend of the percentage of all hospital visits (all ED and some inpatient) via the Syndromic Surveillance data that meets the Centers for Disease Control and Prevention (CDC) COVID-19 related symptoms and case definition.

- **Definitions used for COVID-19 Syndromic Surveillance (SyS)**
  - COVID-19 related percentage of all hospital visits (all ED and some inpatient) is calculated from visit counts meeting the CDC’s case definition, by searching ‘fever and either cough, or shortness of breath’ in the chief complaint and triage notes.
  - Diagnosed Flu percentage is based on counts of visits with flu discharge diagnosis ICD10 codes (J09, J10, or J11).
  - The information below includes all records captured from Colorado Local Syndromic Surveillance counties (Adams, Arapahoe, Boulder, Denver, Douglas, El Paso, Larimer, and Jefferson counties).

- **COVID-19 Related Symptoms and Flu-Related ED Visit Rates in Colorado Local Syndromic Surveillance Counties**
  - Total hospital visits decreased from 5,500 visits to 2,500 visits in the period of 03/10/2020– 03/30/2020.
  - In the past month (03/01/2020-03/30/2020), the average case count of Flu is between 1 and 2 cases per day and the Diagnosed Flu percentage (%) decreased to 1% or lower (Figure).
  - In the past month (03/01/2020-03/30/2020), the average case count with COVID-19 symptoms is 111 cases and its percentage (%) increased from 1% to 4% (Figure). COVID-19 related symptoms include fever and either cough or shortness of breath. The CDC SyS case definition of COVID-19 related visits exclude patients who are diagnosed with flu.
  - Please find more COVID-19 related information on [CDPHE COVID19 Dashboard](http://www.cdphe.gov).

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**Figure. Daily Trends of COVID-19 Related Symptoms and Flu Hospital Visits in Syndromic Surveillance for Colorado Local Syndromic Surveillance Counties**

*The analysis above in the Figure included all records from all facilities which included both domestic patients and patients from other states.*

*Children’s Hospital is not currently submitting syndromic surveillance data.*

*Colorado Local Syndromic Surveillance Counties: Adams, Arapahoe, Boulder, Denver, Douglas, El Paso, Larimer, and Jefferson counties*

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